

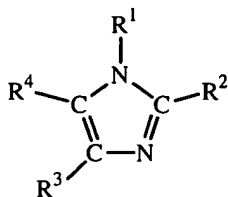
We Claim:

1. A coating powder composition comprising
a glycidyl methacrylate copolymer;
5 a carboxy-functional curing agent;
an optional catalyst, and

1 to 60 phr of diatomaceous earth, wherein the melt flow of the coating
powder composition measured at 300°F at a 35° angle is less than 150 mm, and
wherein the cured coating powder composition has a 60° gloss of greater than 20
10 units.

2. The coating powder composition of Claim 1, wherein the curing agent
comprises sebacic acid.

3. The coating powder composition of Claim 1, wherein the catalyst
comprises a phenol having at least two terminal hydroxyl groups, a dicyandiamine,
an o-tolyl biguanide, an organoborate salt, a polyamine, an imidazole represented by
the formula:



20 wherein R¹-R⁴ are each independently hydrogen, C₁-C₁₂ alkyl, C₆-C₁₈ aryl, C₇-C₁₈
arylalkyl, or C₇-C₁₈ alkylaryl, or a combination comprising at least one of the
foregoing catalysts.

4. The coating powder composition of Claim 3, wherein the catalyst is
25 imidazole, 2-methyl imidazole, 2-phenyl imidazole, or a combination comprising at
least one of the foregoing catalysts.

5. The coating powder composition of Claim 1, wherein the diatomaceous earth is flux-calcined diatomaceous earth.

6. The coating powder composition of Claim 1 further comprising a pigment, an dyes, a filler, an extender, a flow control agent, a plasticizer, or a combination comprising at least one of the foregoing.

7. The coating powder composition of Claim 6, wherein the flow control agent is an acrylonitrile-modified polyalkyl acrylate, an acrylonitrile-modified polyalkyl methacrylate or a combination comprising at least one of the foregoing, wherein the alkyl group has one to eight carbon atoms,

8. The coating powder composition of Claim 7, wherein the flow control agent is on a silica carrier, and is an acrylonitrile-modified polybutyl acrylate, an acrylonitrile-modified polybutyl methacrylate, or a combination comprising at least one of the foregoing.

9. A method of forming a powder coating on a substrate, comprising:
applying a coating powder composition comprising
a glycidyl methacrylate copolymer;
a carboxy-functional curing agent;
an optional catalyst, and
1 to 60 phr of diatomaceous earth, wherein the melt flow of the coating powder composition measured at 300°F at a 35° angle is less than 150 mm, to at least a portion of a wood substrate; and
heating the applied composition at a temperature of less than 131°C and for a period of time effective to fuse and cure the composition to produce a smooth coating having a 60° gloss of greater than 20 units.

10. The method of Claim 9, wherein the substrate is oriented strand board, hardboard, medium density fiberboard, or a combination comprising at least one of the foregoing.

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11. An article formed by the method of claim 9.